

ABSTRACT OF THE DISCLOSURE

Each of the rotor magnetic poles is composed of a winding around a laminated core and each of both ends of each wound wire is connected to a commutator leg part coupled with a tip of a corresponding commutator segment of the commutator unit. Each of the commutator leg parts comprises a base portion extending outward in a direction substantially normal to the radial direction from the tip of the corresponding commutator segment tip and coupled to the commutator segment tip and a tip portion narrowed stepwise to let the ends of a wound wire be connected. A disk-shaped varistor having a hole at the center is mounted over the base portion of the commutator leg part, and each electrode of the varistor is soldered onto the corresponding base portion. Further, the commutator leg parts are punched and cut out of a reel-wound flat parent metal sheet and fixed to the commutator segment tips.